

0200

OIPE

ENTERED

RAW SEQUENCE LISTING DATE: 06/06/2000
PATENT APPLICATION: US/09/579,383 TIME: 17:03:39

Input Set : A:\02600101.app
Output Set: N:\CRF3\06062000\1579383.raw

62 attaatatgt tataatgtat atcttagacca ttaatggaa gacaaaggatt cctattaaga 480
 63 aaacacggct tagaatatgaa aacctatggt atgtatgcata atgaaattag acgtatcaga 540
 64 aaagtacgtc cagatgtat tattttttt tcctttaggtg gagaacacccat tagatagat 600
 65 atagaaaaag aatttggataa ttgtggataaa attatggac ttgttaatgt ttttgattta 660
 66 gatgggttag atattgactg ggaaccacat gggaaatgtttt acaacttaaa tgaatttaat 720
 67 ttttcaaattt attatattaa attaattaac ttgttaagaa aaacttcc ggaagaaaag 780
 68 ttaatttcaa tttctgggtc atccaaatgtc gcattatcat gcgtttcagg agttgcacat 840
 69 ttctgtaaag atgaagaatc tccatataac actaaattttt tgcgtgaaca aatagaaaa 900
 70 aataaaaaat catatgggc agcagcgtat ttatcagcag gaaactttat taaattttt 960
 71 aatacagcaa aggagaaaaat agatcttgc ttatttcaaa catacaattt agaaactaca 1020
 72 aatccagata taatggtaga tatgtactta tccattttt attttggttt aaaaatataac 1080
 73 atcacaatca tatttaggtt ttccatttaga cataacacag gtggatttag tcccgaaaaat 1140
 74 aaagaattat taaatgggtt agggaaaaaa atacatgata aaaaataaaaa taaatattgg 1200
 75 gcagatggta tagggatatg gcattttttt atgaaagaac aattaccaac tggatcatc 1260
 76 gatgtatata tttttcttac aaatattttgg aaacattttaa atccgtaaat acaaactcca 1320
 77 aaagaccta ctataactgaa aaaaaatggaa gactgtacga caatagatga atatgtcc 1380
 78 ggactgtta ttccaaaccat agggatataat tacaacacaca atatgtctat atggaaaaact 1440
 79 agatctttt caattcatgc acctgtgtt gacagatgtt aatggactt ggccaatgtt 1500
 80 tgctatggaa aaatatgcga tggggaaagca gccattttt ataaacactga ctataaagaa 1560
 81 agctcttata ttatggaa agggggaaacca tattttat tattttttttt aatgggtgca acaaggac 1620
 82 cccggaggc aggcaactaga gtcatacaca aaactagatg catccaaatg tccaggggata 1680
 83 gaagaatggaa ataaaaataa tccacataaa ccactagaaag tagaggaaca atatggacaa 1740
 84 gaagtggatt taccattaca ataa 1764
 85 <210> SEQ ID NO: 3
 86 <211> LENGTH: 378
 87 <212> TYPE: PRT
 88 <213> ORGANISM: *Plasmodium falciparum*
 89 <400> SEQUENCE: 3
 90 Met Asn Phe Thr Val Lys Tyr Ser Phe Leu Val Ile Cys Leu Leu Cys
 91 1 5 10 15
 92 Cys Leu Leu Ser Thr Tyr Val Ser Val Ile Glu Gly His Arg Ala Arg
 93 20 25 30
 94 Pro Gly Glu Ser Arg Lys Asn Pro Arg Glu Ile Ile Lys Thr Phe Lys
 95 35 40 45
 96 Glu Ser Gly Lys Gly Ile Ile Gln Gly Tyr Tyr Pro Ser Trp Val Ser
 97 50 55 60
 98 Tyr Asn His Asn Leu Lys Asp Leu Asn Pro Asn Leu Asn Val Val His
 99 65 70 75 80
 100 Met Ser Phe Ala Lys Met Asp Leu Ser Tyr Asp Ser Ile Glu Ser Ile
 101 85 90 95
 102 Val Gly Ser Pro Leu Leu Phe Lys Ser Leu Ile Gly Leu Glu Tyr Ile
 103 100 105 110
 104 Gly Leu Asn Glu Tyr Phe Asn Asp Ala Met Asn Leu Arg Lys Ala Arg
 105 115 120 125
 106 Pro Asp Ile Ile Met Leu Leu Ser Leu Gly Gly Glu Thr Tyr His Pro
 107 130 135 140
 108 Ser Ser Phe Asp Ser Ala Leu Asn Ala Val Glu Lys Ile Ala Asn Leu
 109 145 150 155 160
 110 Val Asp Glu Leu Gly Phe Asp Gly Ile Asp Val Asp Tyr Glu Pro Asn

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124          165          170          175
126 Gly Ser Phe Asp Gly Leu Asn Asp Lys Glu Lys Ala Asp Phe Phe Val
127          180          185          190
129 Gln Tyr Val Thr Lys Leu Arg Glu Tyr Met Cys Asp Asp Lys Leu Ile
130          195          200          205
132 Ser Ile Ser Gln Ser Ser Asn Gly Ala Leu Ser Cys Ile Gly Phe Asn
133          210          215          220
135 Asp Pro Lys Lys Ile Cys Met Asp Asp Glu Ala Pro Tyr Asn Ser Lys
136 225          230          235          240
138 Tyr Phe Asn Lys Pro Asp Val Lys Lys Glu Leu Leu Arg Ala Ala Gln
139          245          250          255
141 Met Ala Ser Ala Gly Gly Ala Ile Tyr Leu Met Asn Asn Leu Lys Asp
142          260          265          270
144 Met Ile Asp Met Val Phe Val Gln Thr Phe Asn Tyr Thr Asn Ser Thr
145          275          280          285
147 Asp Ser Thr Val Met Lys Glu Leu Tyr Asp Ser Tyr Ala Tyr Tyr Gly
148          290          295          300
150 Lys Lys Tyr Asp Tyr Val Ile Ile Met Gly Phe Thr Leu Met Phe Pro
151 305          310          315          320
153 Ser Thr Pro Phe Asn Pro Asn Asp Lys Met Leu Val Lys Ser Ile Gly
154          325          330          335
156 Asp Phe Val Lys Thr Glu Asn Lys Leu Asn Lys Arg Ala Asp Gly Phe
157          340          345          350
159 Gly Leu Trp Ser Leu Ser Ser Asp Asn Ala Ala His Asn Glu Gln Leu
160          355          360          365
162 Ala Ile Glu Tyr Phe Val Glu Ser Leu His
163          370          375
166 <210> SEQ ID NO: 4
167 <211> LENGTH: 587
168 <212> TYPE: PRT
169 <213> ORGANISM: Plasmodium gallinaceum
171 <400> SEQUENCE: 4
172 Met Asn Phe Lys Ile Ser Ile Phe Leu Ile Val Ser Ile Leu Tyr
173 1          5          10          15
175 Ser Ala Asn Ser Arg Thr Leu Lys Gly Lys Asn Asn Ile Asn Asn Ser
176          20          25          30
178 Leu Gly Ile Ile Arg Glu Asn Lys Asn Lys Thr His Gln Thr Glu Ile
179          35          40          45
181 His Glu Ser Phe Ser His Leu Lys Ser Asn Asn Ser Asn Phe Val Glu
182          50          55          60
184 Tyr Gly Ser Tyr Cys Gly Asp Gly Cys Asn Ser Arg Ile Thr Lys Asn
185 65          70          75          80
187 Asn Lys Asn Ile Asn Lys Asn Asp Arg Lys Ser Pro Arg Gln Ile Leu
188          85          90          95
190 Glu Glu Tyr Lys Lys Arg Lys Gln Gly Ile Ile Ala Gly Tyr Tyr Gly
191          100          105          110
193 Ser Trp Asn Ser Gln Gly Asp Arg Ala Lys His Met Ile Asp Ser Asn
194          115          120          125
196 Pro Met Val Ser Ile Leu Tyr Ile Ala Phe Ala Arg Ile Asn Met Leu

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197	130	135	140													
199	Tyr	Asp	Val	Ser	Arg	Pro	Phe	Asn	Gly	Arg	Gln	Arg	Phe	Leu	Leu	Arg
200	145		150		155		160									
202	Lys	His	Gly	Leu	Glu	Tyr	Glu	Thr	Tyr	Gly	Met	Met	Leu	Asn	Glu	Ile
203				165			170								175	
205	Arg	Arg	Ile	Arg	Lys	Val	Arg	Pro	Asp	Val	Ile	Ile	Leu	Leu	Ser	Leu
206				180			185								190	
208	Gly	Gly	Glu	Thr	Tyr	Met	Ile	Asp	Ile	Glu	Lys	Glu	Ile	Asp	Tyr	Val
209				195			200								205	
211	Asp	Lys	Ile	Leu	Lys	Leu	Val	Asn	Asp	Phe	Asp	Leu	Asp	Gly	Val	Asp
212				210			215								220	
214	Ile	Asp	Trp	Glu	Pro	His	Gly	Lys	Phe	Tyr	Asn	Leu	Asn	Glu	Leu	Asn
215	225			230				235							240	
217	Phe	Ser	Asn	Tyr	Tyr	Ile	Lys	Leu	Ile	Asn	Leu	Leu	Arg	Lys	Thr	Ile
218				245				250							255	
220	Pro	Glu	Glu	Lys	Leu	Ile	Ser	Ile	Ser	Gly	Ser	Ser	Asn	Ala	Ala	Leu
221				260			265								270	
223	Ser	Cys	Val	Ser	Gly	Val	Ala	Ser	Phe	Cys	Lys	Asp	Glu	Glu	Ser	Pro
224				275			280								285	
226	Tyr	Asn	Thr	Lys	Phe	Leu	Ser	Glu	Gln	Ile	Glu	Thr	Asn	Lys	Glu	Leu
227				290			295								300	
229	His	Arg	Ala	Ala	Ala	Met	Leu	Ser	Ala	Gly	Thr	Phe	Ile	Asn	Ile	Phe
230	305				310			315							320	
232	Asn	Thr	Ala	Lys	Glu	Lys	Ile	Asp	Leu	Val	Phe	Ile	Gln	Thr	Tyr	Asn
233				325			330								335	
235	Leu	Glu	Thr	Thr	Asn	Pro	Asp	Ile	Met	Val	Asp	Met	Tyr	Leu	Ser	His
236				340			345								350	
238	Leu	Tyr	Phe	Gly	Leu	Lys	Tyr	Asn	Ile	Thr	Ile	Ile	Leu	Gly	Phe	Ser
239				355			360								365	
241	Leu	Glu	His	Asn	Arg	Gly	Gly	Phe	Ser	Pro	Glu	Asn	Lys	Glu	Leu	Leu
242				370			375								380	
244	Glu	Leu	Val	Gly	Lys	Thr	Ile	His	Asp	Lys	Asn	Gln	Asn	Asn	Asn	Arg
245	385				390			395							400	
247	Ala	Asp	Gly	Ile	Gly	Ile	Trp	His	Leu	Phe	Met	Lys	Glu	Gln	Leu	Pro
248				405			410								415	
250	Thr	Gly	Ser	Phe	Asp	Val	Asp	Ile	Phe	Leu	Thr	Asn	Ile	Trp	Lys	His
251				420			425								430	
253	Leu	Asn	Pro	Glu	Val	Gln	Thr	Pro	Lys	Asp	Leu	Thr	Ile	Thr	Glu	Asn
254				435			440								445	
256	Pro	Glu	Asp	Cys	Ser	Thr	Ile	Asp	Glu	Tyr	Val	Pro	Gly	Leu	Val	Ile
257				450			455								460	
259	Pro	Thr	Ile	Gly	Ile	Tyr	Tyr	Lys	His	Asn	Asp	Ala	Ile	Trp	Lys	Thr
260	465				470			475							480	
262	Arg	Ser	Tyr	Ser	Ile	His	Ala	Pro	Gly	Val	Asp	Arg	Tyr	Glu	Trp	Asp
263				485			490								495	
265	Leu	Val	Lys	Val	Cys	Tyr	Glu	Lys	Ile	Cys	Asp	Gly	Lys	Ala	Ala	His
266				500			505								510	
268	Tyr	Tyr	Asn	Thr	Asp	Tyr	Lys	Glu	Ser	Ser	Ile	Ile	Ile	Trp	Lys	Gly
269				515			520								525	

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/579,383

DATE: 06/06/2000

TIME: 17:03:40

Input Set : A:\02600101.app
Output Set: N:\CRF3\06062000\I579383.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:621 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:25
L:621 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:25
L:621 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:25